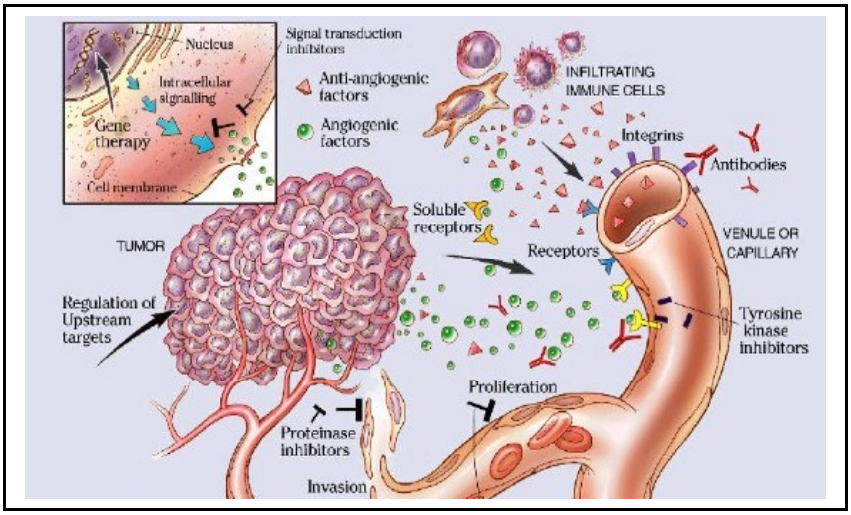
Invitation to Seminar (WS 08/09)

Principles of Cancer Development



Objective

Biological development typically starts from a single fertilized cell, follows a precisely regulated sequence of steps and finally leads to an intricate pattern of differentiated tissues in the adult organism. On the contrary, pathologic unregulated proliferation may result in cancer development and tumour growth. Cancer development can be interpreted as a loss of regulation of homeostatic cooperation in a complex system of interacting cells and molecules. Mathematical modelling is essential to understand key steps such as signalling, differentiation and growth. In this seminar, we are focusing on the developmental dynamics of cancer progression. By means of talks, discussions and computer simulations, key questions and corresponding mathematical models will be introduced.

The seminar is intended for undergraduate and graduate students in mathematics, biology, physics, medical and computer sciences who are interested in this highly interdisciplinary application field.

Time and location

Four Monday afternoons 15.00-18.00: **Nov. 10, Nov. 24, Dec. 8**, 2008 and **Jan. 26**, 2009
Location: **INF-1096**, Computer Science Dept. of TU Dresden at Nöthnitzer Str. 46

Kickoff meeting and distribution of talks

October 20, 15.00-16.00, INF-E008

Organizers

Christopher Antos, Center for Regenerative Therapies Dresden
Lutz Brusch, ZIH, TU Dresden
Arnaud Chauvière, ZIH, TU Dresden
Andreas Deutsch, ZIH, TU Dresden
Andy Oates, Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG)

Seminar website

http://www.tu-dresden.de/zih/lehre/bio/ws0809_sem

Contact

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